



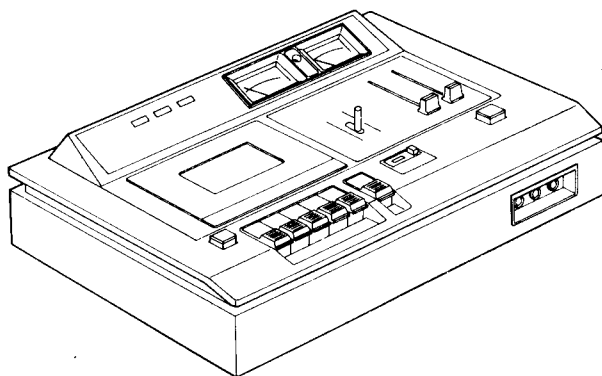
Service Manual



DOLBY SYSTEM



"Dolby" and "Double-D" symbol are trade marks of Dolby Laboratories Inc. Manufactured under license from Dolby Laboratories Inc.



MODEL RT-2500H

SPECIFICATIONS

Type:	AC operated 4-track 2-channel Solid-state Stereo Cassette Tape Record/Playback Deck with Built-in Dolby "B" type Noise Reduction & Full-automatic Stop System	Erasing system:	AC erasing
Power Source:	AC 110/220/240V, 50Hz	Fast forward & Rewind time:	75 seconds (C-60)
Power consumption:	20 watts	Wow & Flutter:	0.13% W.R.M.S.
Semiconductors:	6-transistor, 16-Auxiliary Transistor, 4-IC, 35-diode, 1-Silicon Controlled Rectifier, 1-Light Emission Diode	Frequency response:	40-15,000 Hz (Use of CrO ₂ tape, DIN) 40-13,000 Hz (Use of normal tape, DIN)
Dimensions:	428mm(W) × 268mm(D) × 114mm(H)	S/N ratio:	56 dB (with Dolby NR system, use of CrO ₂ tape, DIN) 52 dB (without Dolby NR system, use of CrO ₂ tape, DIN)
Weight:	5.5 kg	Distortion:	1.0%
Input circuitry:	Microphone jack 500 ohm × 2 REC/PB(DIN) Socket × 1	Channel separation:	34 dB
Output circuitry:	Headphones output jack 8 ohm × 1 REC/PB(DIN) Socket × 1	Erase ratio:	65 dB
Tape:	Philips standard compact cassette tape	Input sensitivity & input impedance:	Microphone 0.1mV @500 ohm REC/PB(DIN) Socket Low: 0.8mV, @10K ohm High: 40mV, @50K ohm
Tape speed:	4.8cm/sec	Output level & loaded impedance:	Headphones 1mW (0VU) @8 ohm REC/PB(DIN) Socket 410mV, @50K ohm
Record/Playback time:	60 minutes (C-60)		
Recording system:	AC bias system (84 kHz)		

SHARP CORPORATION OSAKA, JAPAN

CABINET REMOVAL (Refer to Figure 1)

1. Depress the EJECT knob and take out the cassette.
2. Remove 2 RECORD LEVEL control knobs.
3. Remove 4 cabinet bottom retaining screws and cabinet bottom.
4. Remove 6 chassis retaining screws (Painted red). Now, the panel top is ready for removal.

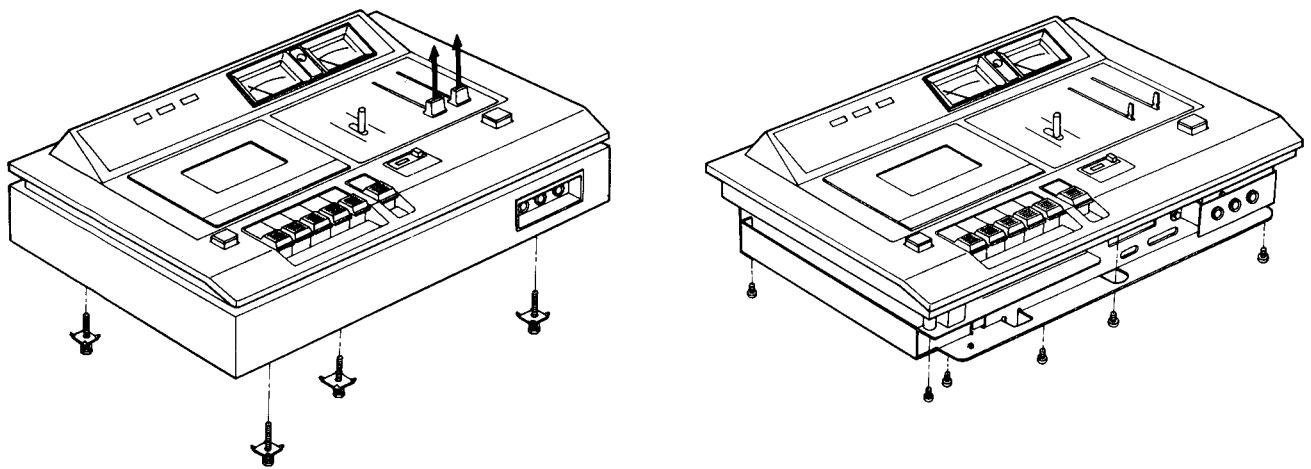


Figure 1

CrO₂ TAPE DETECTOR ADJUSTMENT (Refer to Figure 2)

- 1) Make sure that a clearance between the cassette detect lever bracket and mechanism mounting plate is about 1 mm.
- 2) Insert CrO₂ cassette tape into the unit and make sure that CrO₂ tape detect lever will be put in the aperture of CrO₂ cassette tape.
- 3) Under this condition, adjust CrO₂ tape switch (SW5) to be turned on.
- 4) Then, insert a normal quality tape in the unit and adjust CrO₂ tape switch (SW5) to be turned off.

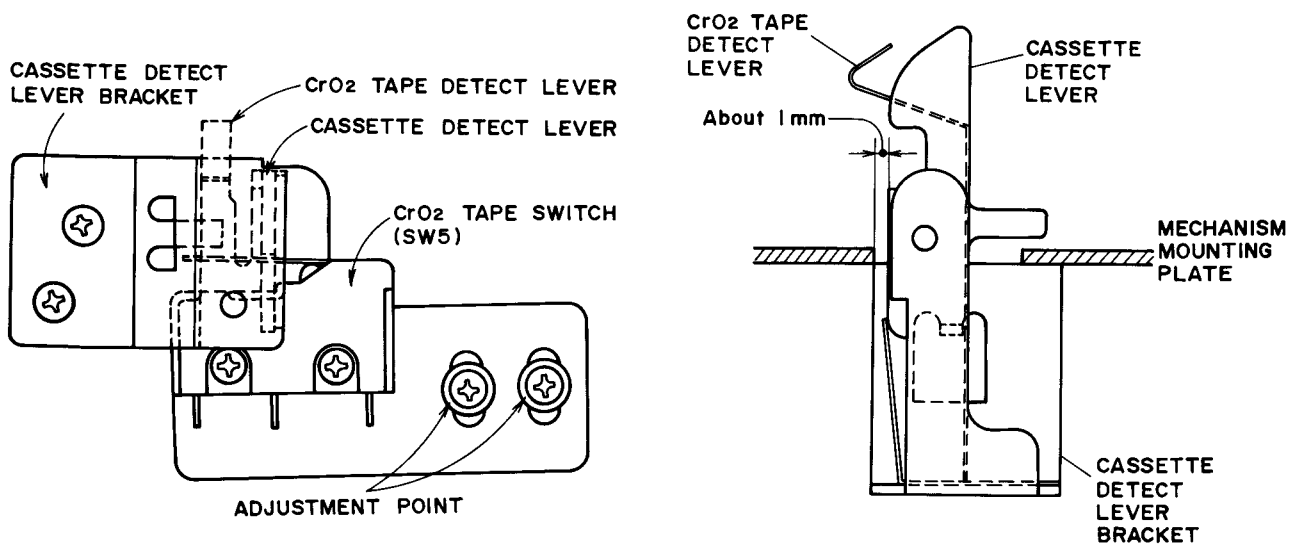


Figure 2

PRESSURE ROLLER PRESSURE ADJUSTMENT (Refer to Figure 3)

1. With power supply turned on, push the point A with use of tension gauge to make the pressure roller apart from the capstan shaft. Then, gradually release the tension gauge and read its value when the pressure roller starts to rotate.
2. It is normal when the tension gauge reads 260 – 312 gr. (9.2 – 11oz). If the above value is not satisfied, change the setting position of pressure spring.

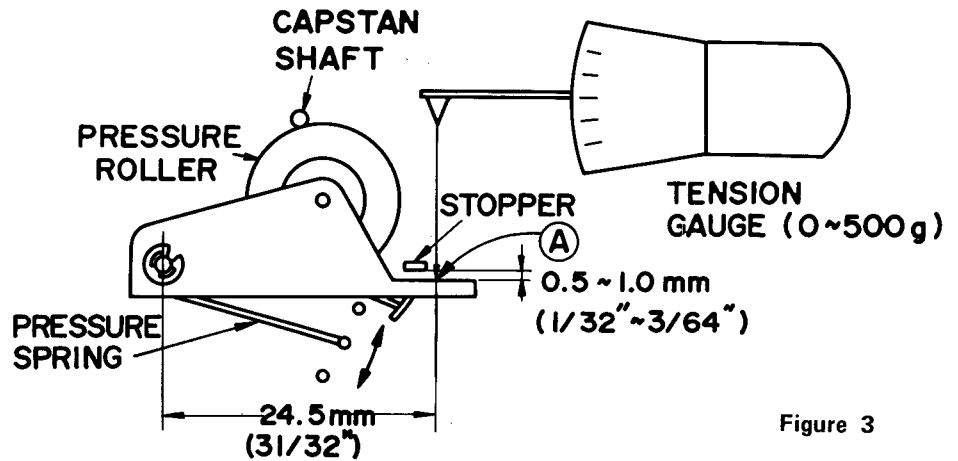


Figure 3

FLYWHEEL THRUST CLEARANCE ADJUSTMENT (Refer to Figure 4)

Slowly tighten the screw for flywheel thrust clearance until the thrust clearance becomes 0 (zero) and loosen the screw by 1/4 turn from this point. Since screw's pitch is 0.8mm (1/32"), thrust clearance of about 0.2mm (1/128") is produced.

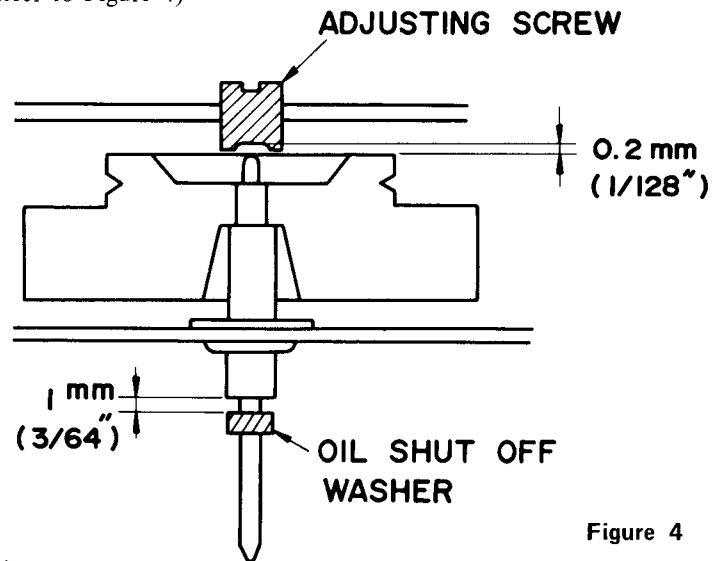
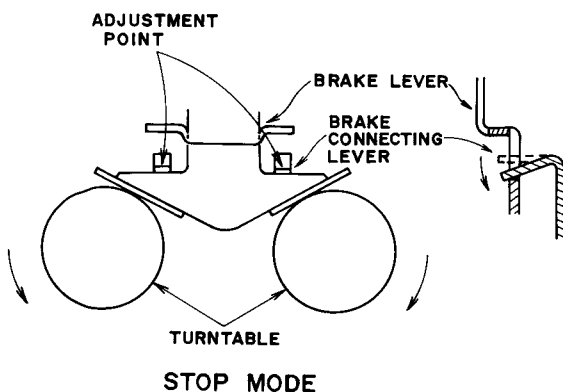


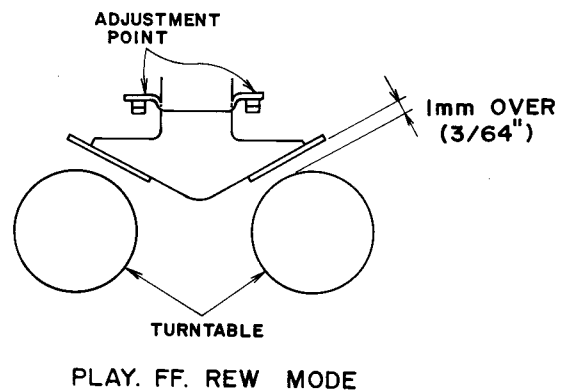
Figure 4

BRAKE MECHANISM ADJUSTMENT (Refer to Figure 5)

1. Check that the brake lever is pressed against the turntable in STOP mode and that the brake lever is apart at the same distance from the turntable in PLAY, FAST FWD and REWIND modes.
2. Adjust it by bending the adjustment point when the distance is abnormal.



STOP MODE



PLAY. FF. REW MODE

Figure 5

TORQUE CHECK (Refer to Figure 6)

1. Set the torque measuring reel to the turntable (to the take-up side at PLAY or FAST FWD mode and to the supply side at REWIND mode).
2. Then, rotate the reel in the same direction as for turntable and read the torque value when the pointer is stabilized.

Mode	Torque Value
PLAY	40 – 60 gr. cm
FAST FWD	Over 60 gr. cm
REWIND	Over 60 gr. cm

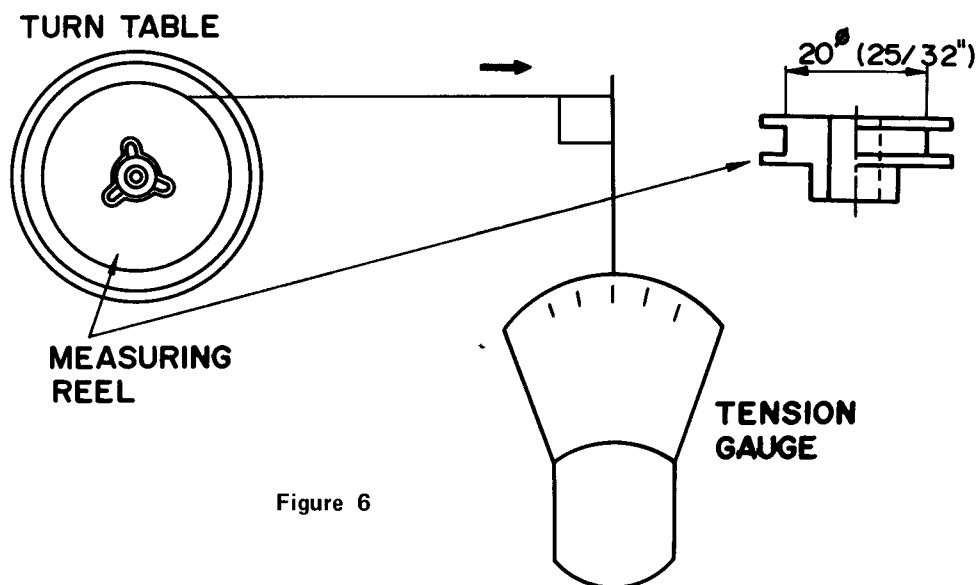
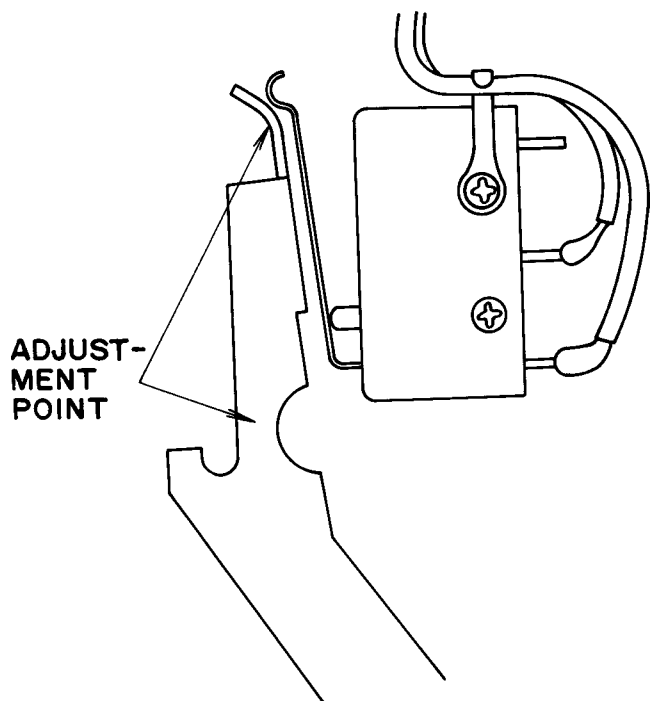


Figure 6

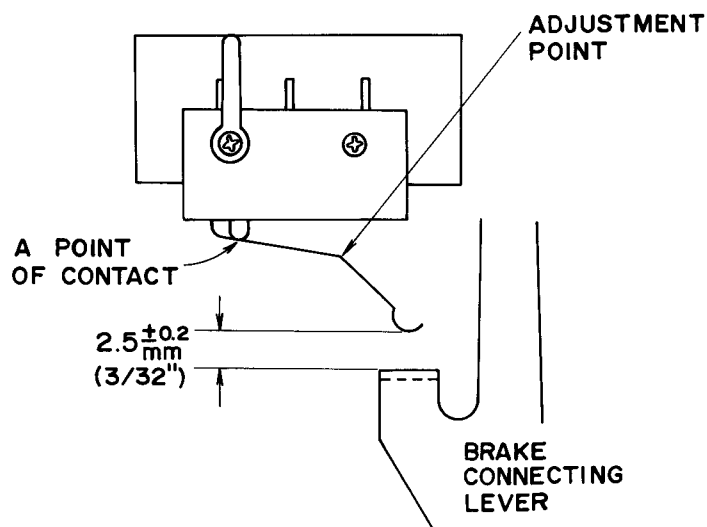
MOTOR SWITCH/MUTING SWITCH SETTING POSITION ADJUSTMENT (Refer to Figure 7 and Figure 8)

1. Check that the brake connecting lever is pressed against the switch (SW8/SW9) in PLAY mode and that the brake connecting lever is apart at the distance from the switch (SW8/SW9) in STOP mode.
2. Adjust it by bending the adjustment point when the distance is abnormal.



STOP MODE

Figure 7



STOP MODE

Figure 8

PAUSE SWITCH SETTING POSITION ADJUSTMENT (Refer to Figure 9)

Loosen the screw so that the contact clearance will be 0.5mm (1/64") in the STOP mode, as shown in Figure 9. Be sure the contact points touch with each other tightly.

MUTING SWITCH SETTING POSITION ADJUSTMENT (Refer to Figure 9)

Loosen the screw so that the contact clearance will be 0.5 ~ 1.0mm (1/64" ~ 1/32") in the PLAYBACK mode, as shown in Figure 9. Be sure the contact points touch with each other tightly.

BIAS SWITCH SETTING POSITION ADJUSTMENT (Refer to Figure 9)

Loosen the screw so that the contact points will be touch with each other tightly in the PLAYBACK mode.

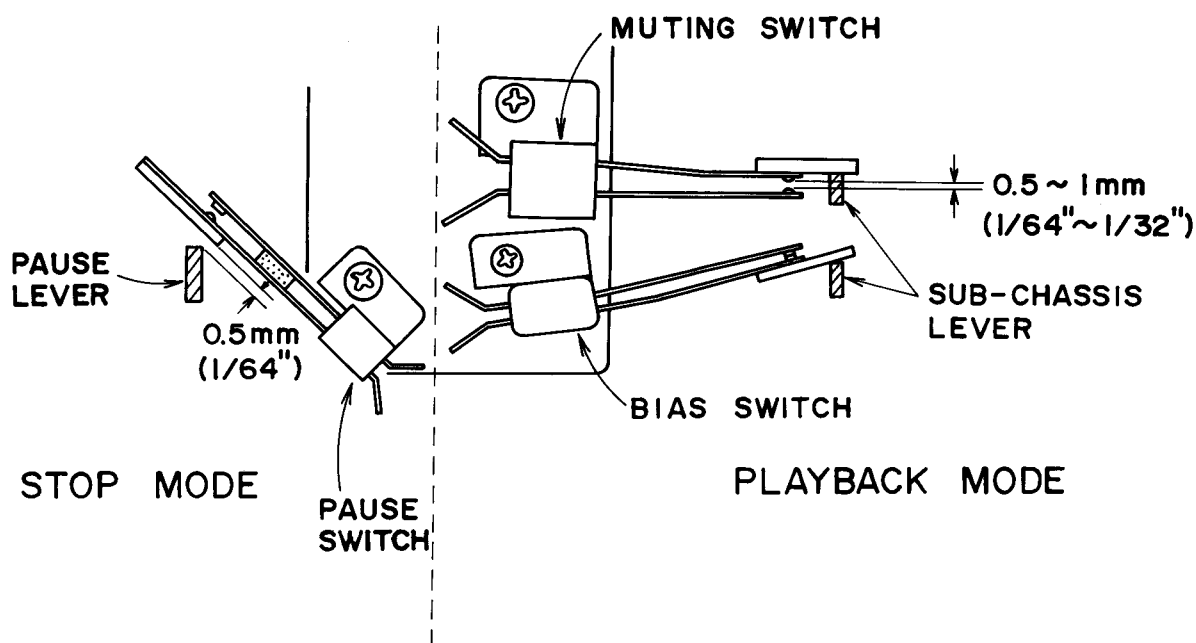


Figure 9

CHECK AND ADJUSTMENT OF TAPE SPEED

1. Measurement of tape speed
 - a) Playback a test tape of 3,000Hz, available in the market.
 - b) Connect an 8 ohms dummy resistor earphone jack, and connect the input terminals of the speed meter or the WOW meter to the resistor.
 - c) Adjust the measureable level by the volume knob.
 - d) It is normal when the regeneration frequency is within $\pm 1\%$ of the meter.
2. Adjustment of tape speed

When the results of measurement are not satisfactory, take off oil on the belt or pulley. When the motor or the pulley does not smoothly revolve, feel oil or change the part. If the operation is still abnormal, adjust the semi-variable resistor (VR601 : Narrow Range, VR602 : Wide Range) on the motor board by using a screw driver.

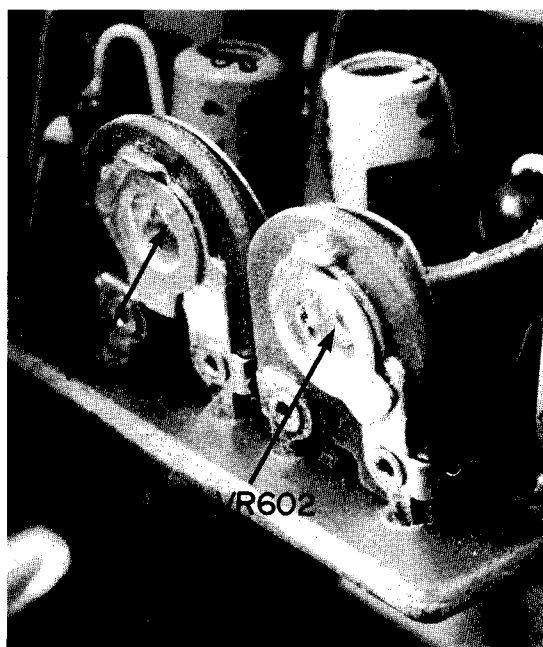


Figure 10

ELECTRICAL ADJUSTMENT

RECORD AMPLIFIER BIAS OSCILLATOR ADJUSTMENT (Refer to Figure 11)

- 1) As shown in Fig. 11, connect the resistor of 100 ohm ($1/4W$, $\pm 5\%$) in between the record/playback head terminal and the lead wire (Red) and then connect the V.T.V.M. to the both sides.
- 2) Set the TAPE Selector Switch (SW5) in the CrO_2 position.
- 3) Set the unit at "RECORD" mode.
- 4) Then, connect the frequency counter to the output terminal of the V.T.V.M. and adjust the oscillation coil (L303) so that the bias oscillation frequency becomes 84 kHz.
- 5) Adjust the Semi-variable resistor (VR301, VR302) so that the V.T.V.M. reads 78mV.
- 6) To check the normal position, leave TAPE Selector Switch (SW5) in the NORMAL position.
It is normal if V.T.V.M.'s reading is 61 ~ 69mV.

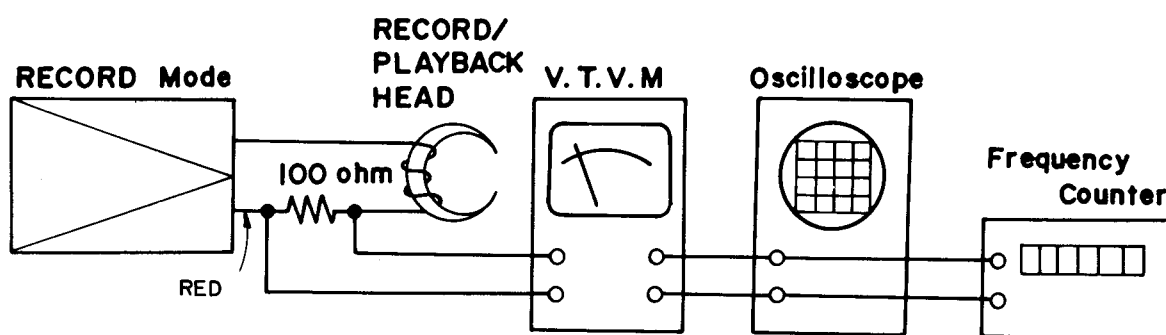


Figure 11

LEVEL METER SENSITIVITY ADJUSTMENT (Refer to Figure 12)

- 1) Connect the V.T.V.M. in between the test point (TP-1, TP-2) and earth.
- 2) With the unit set at "RECORD" mode, give it signal of -46 dB, 1 kHz from REC/PB Socket (SO101) and adjust RECORD LEVEL Control (VR103, VR104) so that the V.T.V.M. reads 580mV.
- 3) Set Dolby Noise Reduction (SW-4) in the off position.
- 4) At this time, adjust the semi-variable resistor (VR111, VR112) so that the level meter indicates Dolby Level (it means a level of "+ 3VU" indicated on the level meter.)

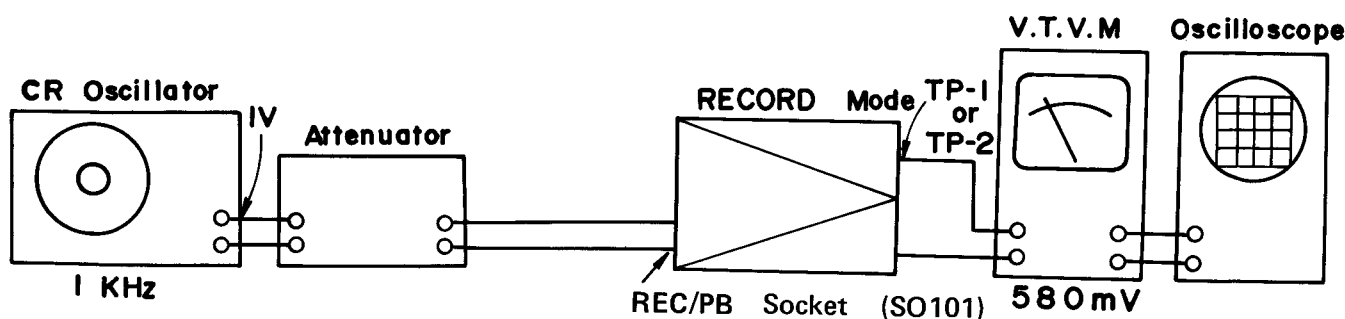


Figure 12

PLAYBACK SENSITIVITY ADJUSTMENT (Refer to Figure 13)

- 1) Set the unit at playback mode.
- 2) Connect 50K ohm dummy resistor to the REC/PB Socket (SO101) and connect the V.T.V.M. to its ends.
- 3) Load the unit with a test tape (MTT-150, 400 Hz recorded) and play it.
- 4) Set Dolby Noise Reduction (SW-4) in the off position, and TAPE Selector Switch (SW5) the normal position.
- 5) At this time, adjust the semi-variable resistor (VR101, VR102) so that the V.T.V.M. reads 580mV.

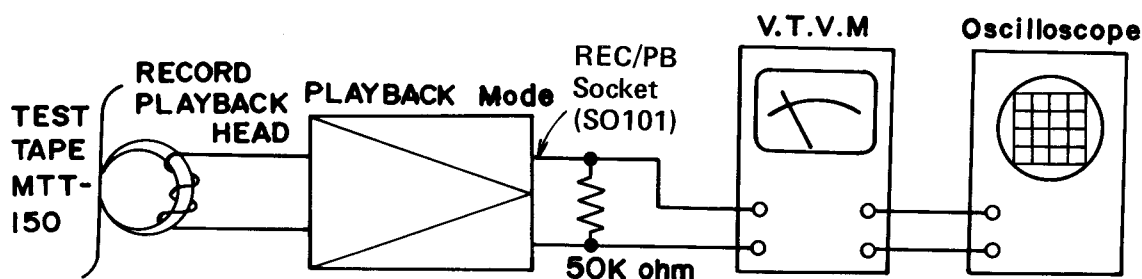


Figure 13

ERASE CURRENT CHECK (Refer to Figure 14)

- 1) Set the unit at "RECORD" mode.
- 2) Set the TAPE Selector switch (SW5) in the CrO₂ position.
- 3) Connect V.T.V.M. to the test point (TP3).
It is normal if V.T.V.M.'s reading is 50 ~ 110mV.
- 4) To check the normal position, leave TAPE Selector Switch (SW5) in the NORMAL position.
It is normal if V.T.V.M.'s reading is 35 ~ 85mV.

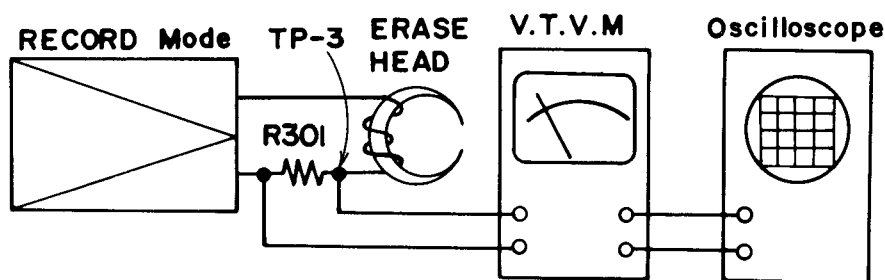


Figure 14

RECORD/PLAYBACK HEAD AZIMUTH ADJUSTMENT (Refer to Figure 15)

- 1) Set Dolby Noise Reduction Switch (SW-4) in the off position.
- 2) Set TAPE Selector Switch (SW5) in the normal position.
- 3) Connect 50K ohm dummy resistor to the REC/PB Socket (SO101) and connect the V.T.V.M. to its ends.
- 4) Insert the test tape (MTT-114, 10 kHz Recorded).
- 5) Adjust the adjusting screw so that the playback output voltage of the test tape becomes maximum in both sides and the phase between channels gets same.

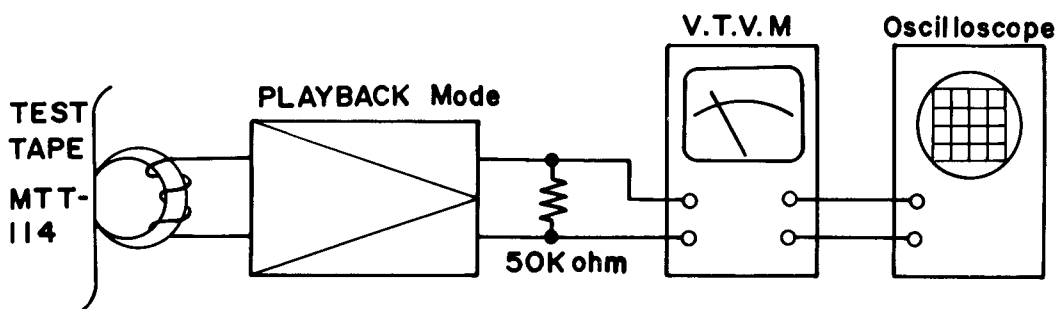


Figure 15

RECORD/PLAYBACK SENSITIVITY ADJUSTMENT (Figure 16)

- 1) Connect the V.T.V.M. in between the test point (TP-1, TP-2) and earth.
- 2) Insert the tape (non-recorded).
- 3) With the unit set at "RECORD" mode, give it signal of -46 dB, 1 kHz from REC/PB Socket (SO101) and adjust RECORD LEVEL Control (VR103, VR104) so that the V.T.V.M. reads 410mV (INPUT LEVEL Switch : LOW Position).
- 4) Set the unit at record mode, and playing it.
- 5) Adjust the semi-variable resistor (VR107, VR108) so that the V.T.V.M. reads the playback output voltage of 410mV.
- 6) To check the CrO₂ tape, leave TAPE Selector Switch (SW5) in the CrO₂ position.
- 7) Adjust the semi-variable resistor (VR109, VR110) so that the V.T.V.M. reads the playback output voltage of 410mV.

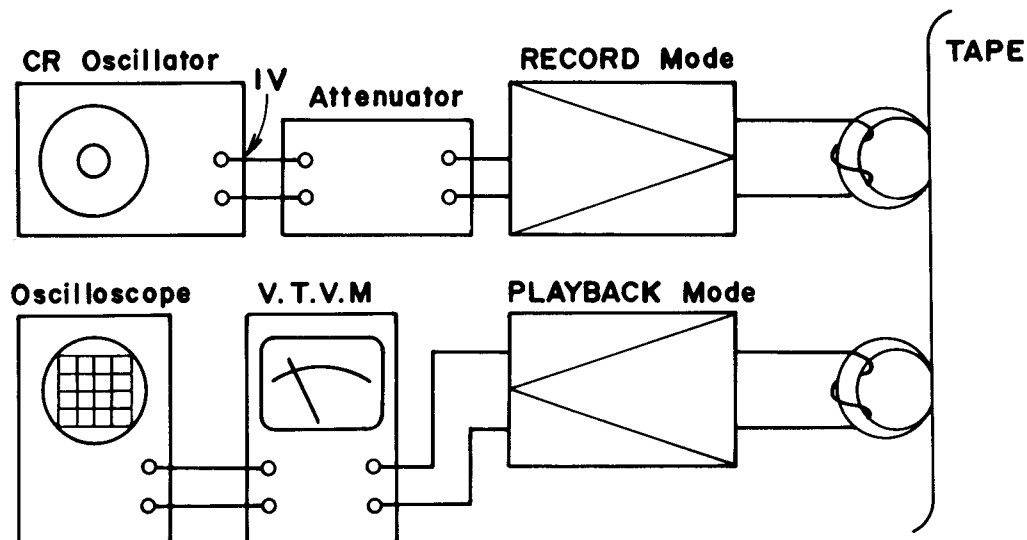


Figure 16

IC101, IC102 RH-IX0437AGZZ

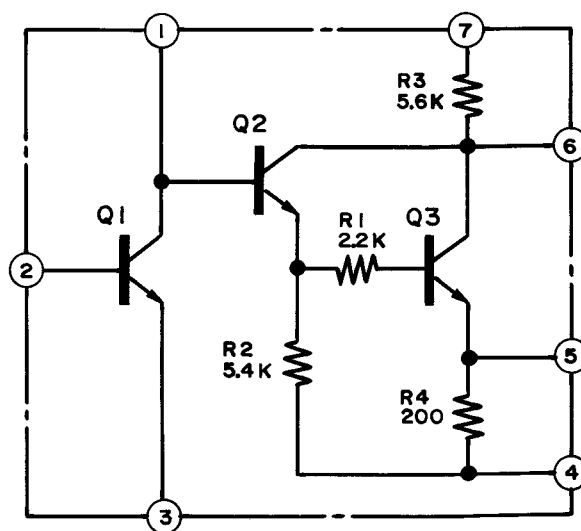
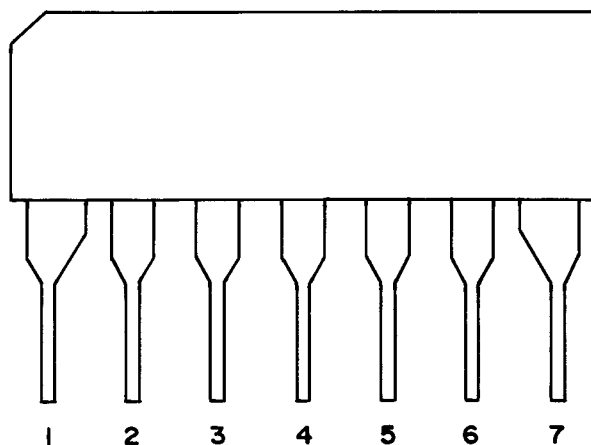
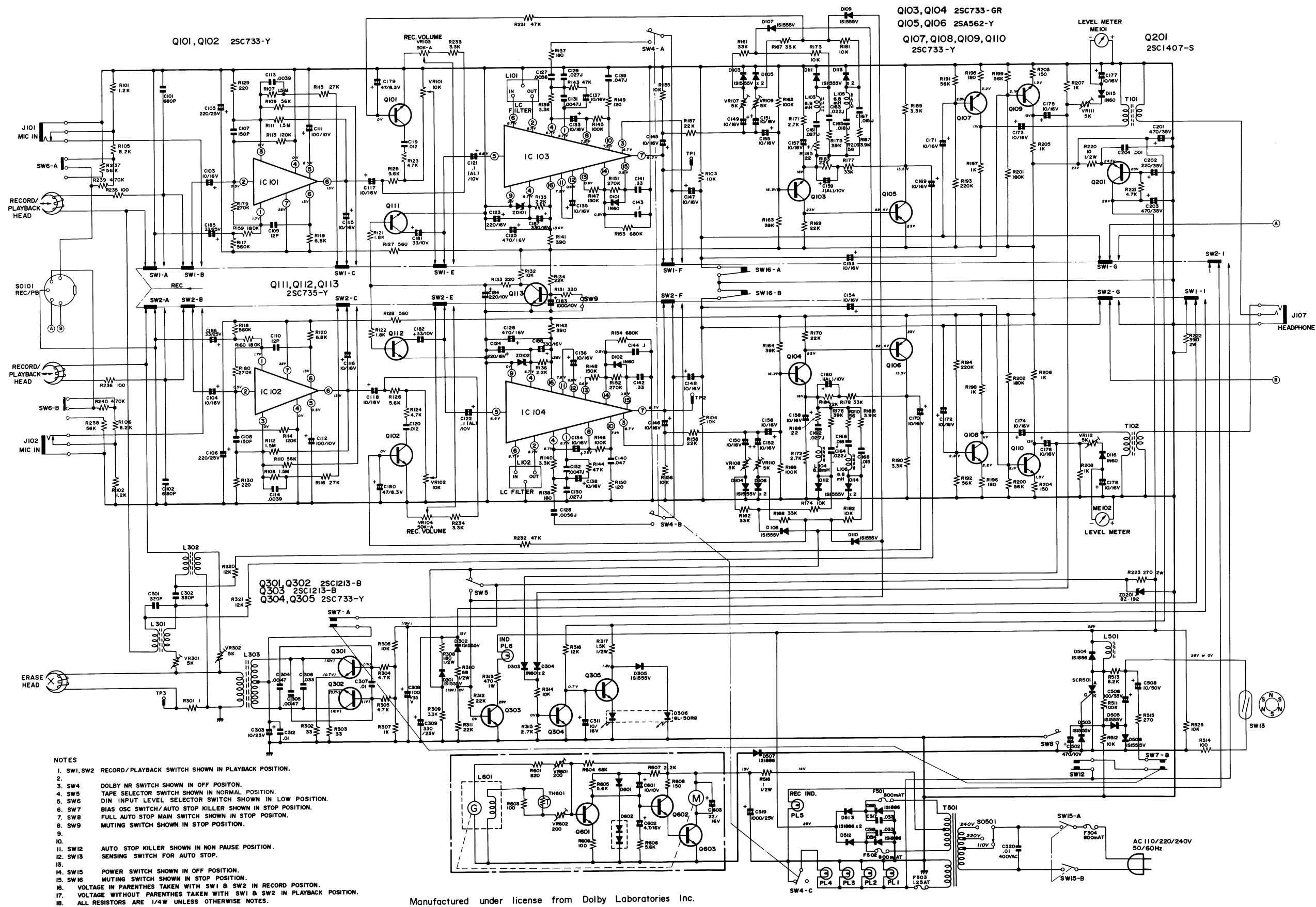


Figure 17

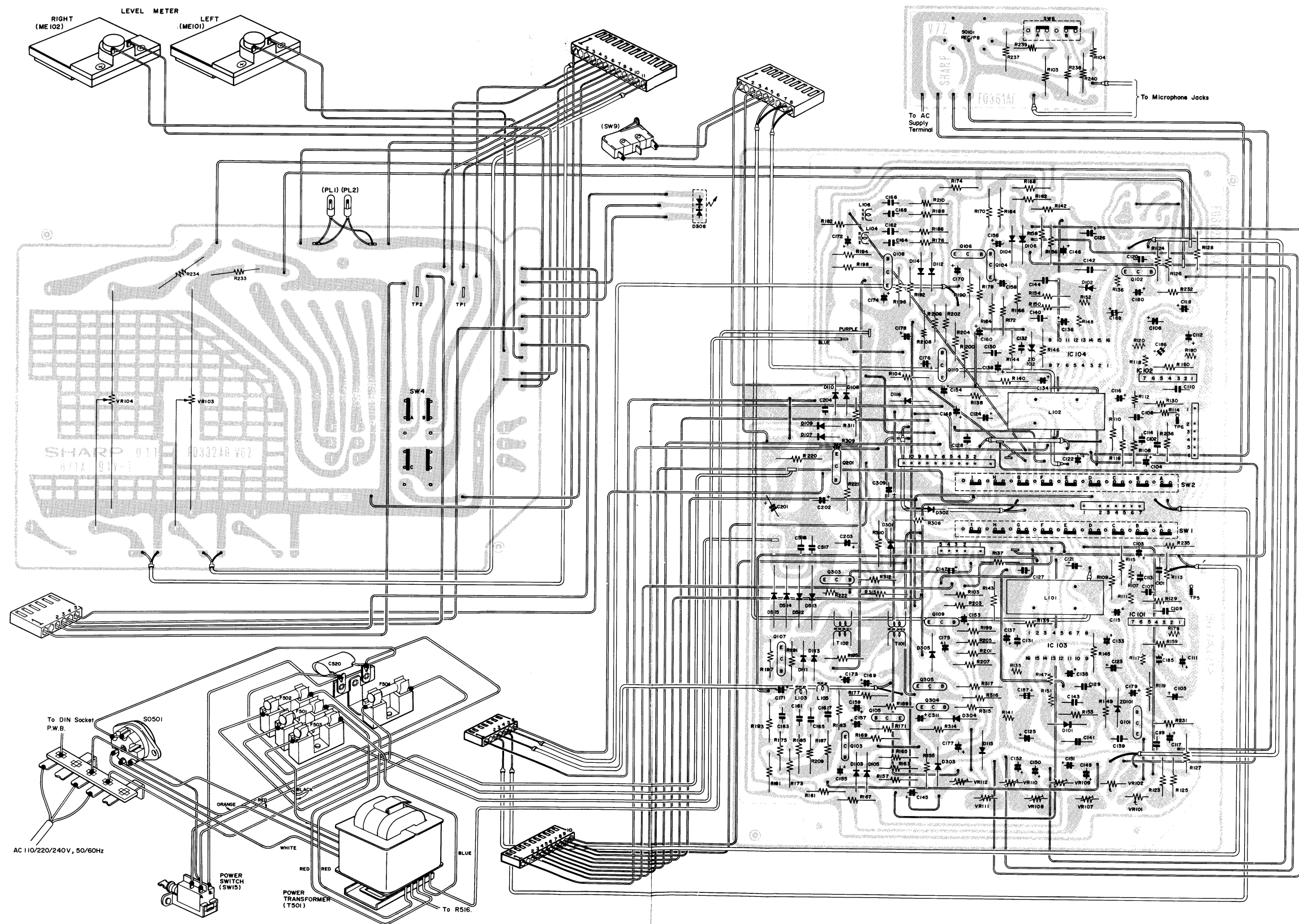


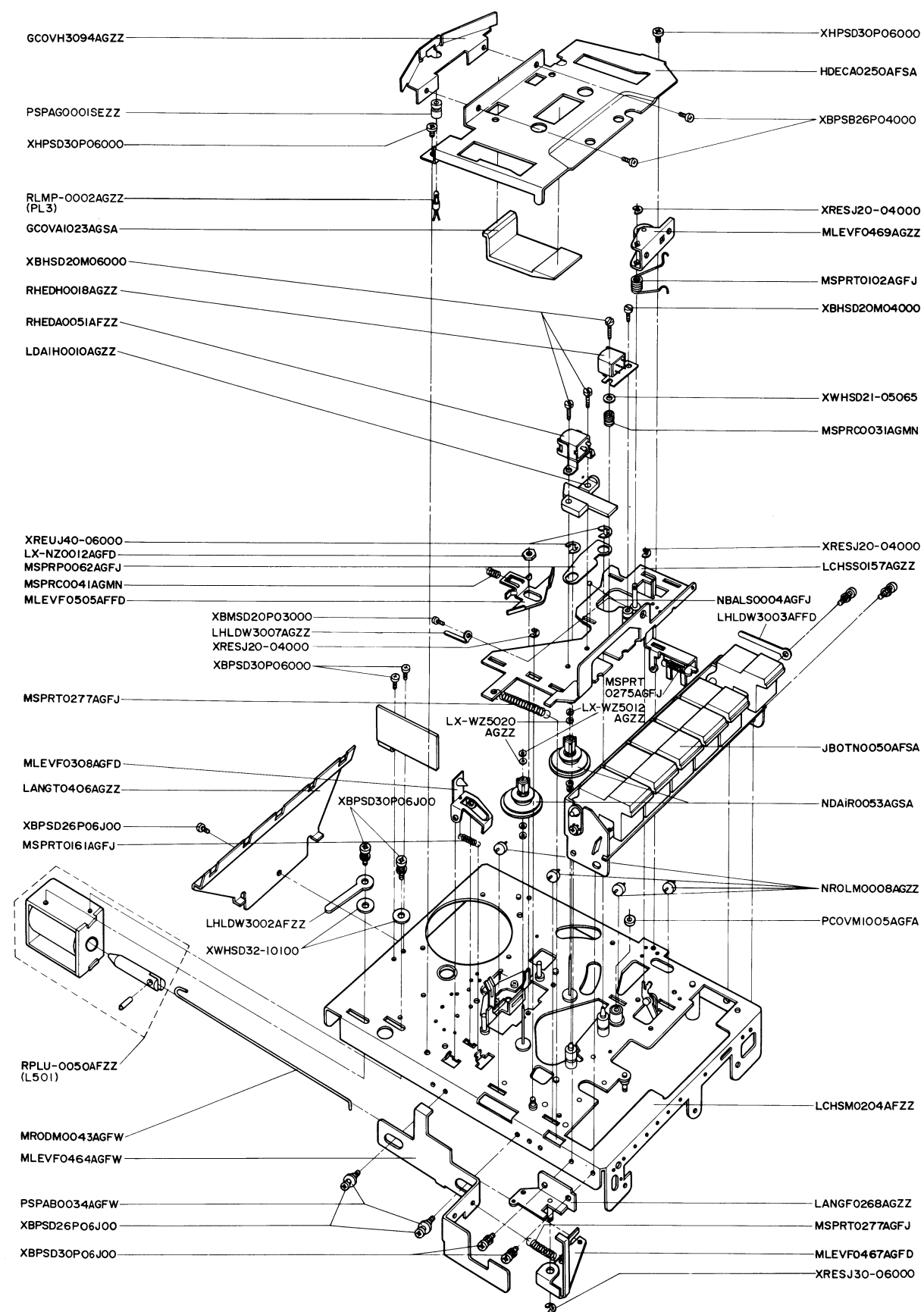
- NOTES
1. SW1, SW2 RECORD/PLAYBACK SWITCH SHOWN IN PLAYBACK POSITION.
 - 2.
 3. SW4 DOLBY NR SWITCH SHOWN IN OFF POSITION.
 4. SW5 TAPE SELECTOR SWITCH SHOWN IN NORMAL POSITION.
 5. SW6 DIN INPUT LEVEL SELECTOR SWITCH SHOWN IN LOW POSITION.
 6. SW7 BIAS OSC SWITCH/AUTO STOP KILLER SHOWN IN STOP POSITION.
 7. SW8 FULL AUTO STOP MAIN SWITCH SHOWN IN STOP POSITION.
 8. SW9 MUTING SWITCH SHOWN IN STOP POSITION.
 - 9.
 - 10.
 11. SW12 AUTO STOP KILLER SHOWN IN NON PAUSE POSITION.
 12. SW13 SENSING SWITCH FOR AUTO STOP.
 - 13.
 14. SW15 POWER SWITCH SHOWN IN OFF POSITION.
 15. SW16 MUTING SWITCH SHOWN IN STOP POSITION.
 16. VOLTAGE IN PARENTHESES TAKEN WITH SW1 & SW2 IN RECORD POSITON.
 17. VOLTAGE WITHOUT PARENTHESES TAKEN WITH SW1 & SW2 IN PLAYBACK POSITION.
 18. ALL RESISTORS ARE 1/4W UNLESS OTHERWISE NOTES.

Manufactured under license from Dolby Laboratories Inc.

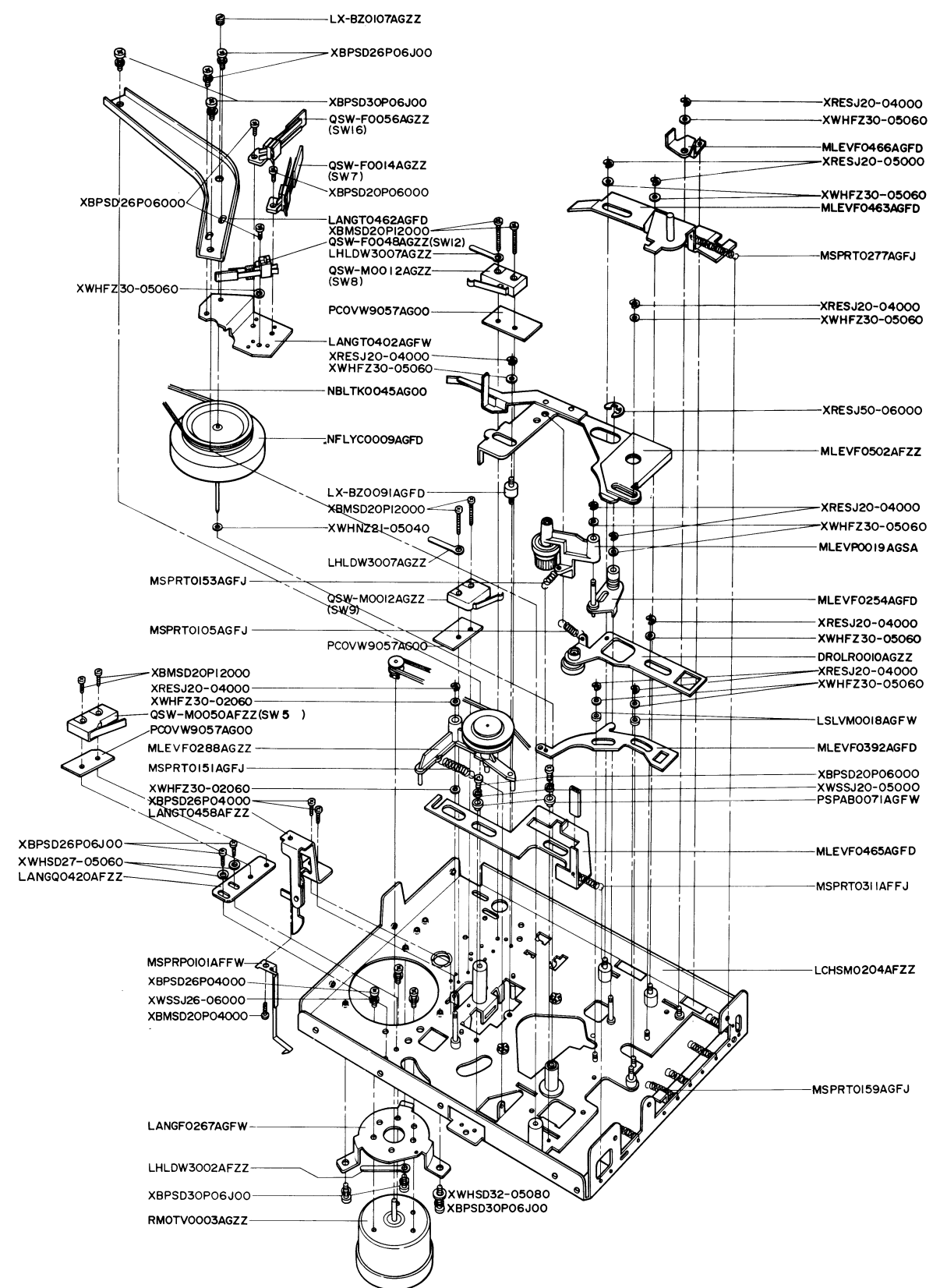
Specifications or wiring diagrams of this model are subject to change for the improvement without prior notice.

SCHEMATIC DIAGRAM





MECHANISM EXPLODED TOP VIEW



MECHANISM EXPLODED BOTTOM VIEW

PARTS LIST

MODEL
RT-2500H

MODEL
RT-2500H



PARTS LIST

“HOW TO ORDER REPLACEMENT PARTS”

To have your order filled promptly and correctly, please furnish the following informations.

- | | |
|-----------------|----------------|
| 1. MODEL NUMBER | 2. REF. NO. |
| 3. PART NO. | 4. DESCRIPTION |

REF. NO.	PART NO.	DESCRIPTION	CODE	REF. NO.	PART NO.	DESCRIPTION	CODE
----------	----------	-------------	------	----------	----------	-------------	------

CAPACITORS

CAPACITORS			
C101, C102	VCCSPU1HL681K	680PF, 50V, +10 -10%, Ceramic	AA
C103, C104	VCEAAU1CW106Y	10MFD, 16V, +50 -10%, Electrolytic	AB
C105, C106	VCEAAU1EW227Y	220MFD, 25V, +50 -10%, Electrolytic	AC
C107, C108	VCCSPU1HL151K	150PF, 50V, +10 -10%, Ceramic	AA
C109, C110	VCCSPU1HL120K	12PF, 50V, +10 -10%, Ceramic	AA
C111, C112	VCEAAU1AW107Y	100MFD, 10V, +50 -10%, Electrolytic	AB
C113, C114	VCQYKU1HM392J	.0039MFD, 50V, +5 -5%, Mylar	AC
C115, C116	VCEAAU1CW106Y	10MFD, 16V, +50 -10%, Electrolytic	AB
C117, C118	VCEAAU1CW106Y	10MFD, 16V, +50 -10%, Electrolytic	AB
C119, C120	VCQYKU1HM123J	.012MFD, 50V, +5 -5%, Mylar	AC
C121, C122	VCAAAU1AB104M	.1MFD, 10V, +20 -20%, Aluminum Electrolytic	AC
C123, C124	VCEAAU1CW227Y	220MFD, 16V, +50 -10%, Electrolytic	AC
C125, C126	VCEAAU1CW477Y	470MFD, 16V, +50 -10%, Electrolytic	AD
C127, C128	VCQYKU1HM562J	.0056MFD, 50V, +5 -5%, Mylar	AC
C129, C130	VCQYKU1HM273J	.027MFD, 50V, +5 -5%, Mylar	AC
C131, C132	VCQYKU1HM472J	.0047MFD, 50V, +5 -5%, Mylar	AC
C133, C134	VCEAAU1CW106Y	10MFD, 16V, +50 -10%, Electrolytic	AB
C135, C136	VCEAAU1CW106Y	10MFD, 16V, +50 -10%, Electrolytic	AB
C137, C138	VCEAAU1CW106Y	10MFD, 16V, +50 -10%, Electrolytic	AB
C139, C140	VCQYKU1HM473J	.047MFD, 50V, +5 -5%, Mylar	AC
C141, C142	VCQYKU1HM334K	.33MFD, 50V, +10 -10%, Mylar	AE
C143, C144	VCQYKU1HM104K	.1MFD, 50V, +10 -10%, Mylar	AC
C145, C146	VCEAAU1CW106Y	10MFD, 16V, +50 -10%, Electrolytic	AB
C147, C148	VCEAAU1CW106Y	10MFD, 16V, +50 -10%, Electrolytic	AB
C149, C150	VCEAAU1CW106Y	10MFD, 16V, +50 -10%, Electrolytic	AB
C151, C152	VCEAAU1CW106Y	10MFD, 16V, +50 -10%, Electrolytic	AB
C153, C154	VCEAAU1CW106Y	10MFD, 16V, +50 -10%, Electrolytic	AB
C155, C156	VCEAAU1CW106Y	10MFD, 16V, +50 -10%, Electrolytic	AB
C157, C158	VCEAAU1CW106Y	10MFD, 16V, +50 -10%, Electrolytic	AB
C159, C160	VCAAAU1AB104M	.1MFD, 10V, +10 -10%, Aluminum Electrolytic	AC
C161, C162	VCQYKU1HM273J	.027MFD, 50V, +5 -5%, Mylar	AC
C163, C164	VCQYKU1HM223J	.022MFD, 50V, +5 -5%, Mylar	AC
C165, C166	VCQYKU1HM183J	.018MFD, 50V, +5 -5%, Mylar	AC
C167, C168	VCQYKU1HM153K	.015MFD, 50V, +5 -5%, Mylar	AB
C169, C170	VCEAAU1CW106Y	10MFD, 16V, +50 -10%, Electrolytic	AB
C171, C172	VCEAAU1CW106Y	10MFD, 16V, +50 -10%, Electrolytic	AB
C173, C174	VCEAAU1CW106Y	10MFD, 16V, +50 -10%, Electrolytic	AB
C175, C176	VCEAAU1CW106Y	10MFD, 16V, +50 -10%, Electrolytic	AB
C177, C178	VCEAAU1CW106Y	10MFD, 16V, +50 -10%, Electrolytic	AB
C179, C180	VCEAAU0XW476Y	47MFD, 6.3V, +50 -10%, Electrolytic	AB
C181, C182	VCEAAU1AW336Y	33MFD, 10V, +50 -10%, Electrolytic	AB
C183	VCEAAU1AW108Y	1000MFD, 10V, +50 -10%, Electrolytic	AD
C184	VCEAAU1AW227Y	220MFD, 10V, +50 -10%, Electrolytic	AC
C185, C186	VCEAAU1EW336Y	33MFD, 25V, +50 -10%, Electrolytic	AC
C187, C188	VCEAAU1CW337Y	330MFD, 16V, +50 -10%, Electrolytic	AD
C189, C190	VCQYKU1HM272K	.0027MFD, 50V, +10 -10%, Mylar	AB
C201	VCEAAU1VW477Y	470MFD, 35V, +50 -10%, Electrolytic	AE
C202	VCEAAU1VW227Y	220MFD, 35V, +50 -10%, Electrolytic	AD
C203	VCEAAU1VW477Y	470MFD, 35V, +50 -10%, Electrolytic	AE
C204	VCKZPU1HF102Z	.001MFD, 50V, +80 -20%, Ceramic	AA
C301, C302	VCCSPU1HL331K	330PF, 50V, +10 -10%, Ceramic	AB

REF. NO.	PART NO.	DESCRIPTION	CODE	REF. NO.	PART NO.	DESCRIPTION	CODE
C303	VCEAAU1EW106Y	10MFD, 25V, +50 – 10%, Electrolytic	AB	R127, R128	VRD-ST2EY561J	560 ohm	AA
C304, C305	VCQYKU1HM472K	.0047MFD, 50V, +10 – 10%, Mylar	AB	R129, R130	VRD-ST2EY221J	220 ohm	AA
C306	VCQYKU1HM333K	.033MFD, 50V, +10 – 10%, Mylar	AB	R131	VRD-ST2EY331J	330 ohm	AA
C307	VCQYKU1HM103K	.01MFD, 50V, +10 – 10%, Mylar	AB	R132	VRD-ST2EY103J	10K ohm	AA
C308	VCEAAU1VW107Y	100MFD, 35V, +50 – 10%, Electrolytic	AD	R133	VRD-ST2EY221J	220 ohm	AA
C309	VCEAAU1EW337Y	330MFD, 25V, +50 – 10%, Electrolytic	AE	R134	VRD-ST2EY223J	22K ohm	AA
C311	VCEAAU1CW106Y	10MFD, 16V, +50 – 10%, Electrolytic	AB	R135, R136	VRD-SU2EY222J	2.2K ohm	AA
C312	VCKZPU1EF103Z	.01MFD, 25V, +80 – 20%, Ceramic	AC	R137, R138	VRD-ST2EY181J	180 ohm	AA
C502	VCEAAU1AW477Y	470MFD, 10V, +50 – 10%, Electrolytic	AD	R139, R140	VRD-ST2EY332J	3.3K ohm	AA
C506	VCEAAU1VW107Y	100MFD, 35V, +50 – 10%, Electrolytic	AD	R141	VRD-SU2EY391J	390 ohm	AA
C508	VCEAAU1HW106Y	10MFD, 50V, +50 – 10%, Electrolytic	AC	R142	VRD-ST2EY391J	390 ohm	AA
C517, C518	VCKZPU1MF333P	.033MFD, 75V, +100 – 0%, Ceramic	AC	R143, R144	VRD-ST2EY473J	47K ohm	AA
C519	VCEAAU1EW108Y	1000MFD, 25V, +50 – 10%, Electrolytic	AF	R145, R146	VRD-ST2EY104J	100K ohm	AA
C520	VCQPSU3AA103K	.01MFD, 10000V, +10 – 10%, Mylar	AD	R147, R148	VRD-SU2EY154J	150K ohm	AA
C601, C602, C603	Not Available	Part of Motor		R149, R150	VRD-ST2EY121J	120 ohm	AA
				R151, R152	VRD-SU2EY274J	270K ohm	AA
				R153, R154	VRD-ST2EY684J	680K ohm	AA
				R155, R156	VRD-ST2EY103J	10K ohm	AA
				R157, R158	VRD-ST2EY223J	22K ohm	AA

RESISTORS

(Unless otherwise specified resistors are $\frac{1}{4}W$, $\pm 5\%$, Carbon type.)

R101, R102	VRD-ST2EY122J	1.2K ohm	AA	R162, R163, R164	VRD-ST2EY393J	39K ohm	AA
R103, R104	VRD-ST2EY103J	10K ohm	AA	R165, R166	VRD-ST2EY104J	100K ohm	AA
R105, R106	VRD-ST2EY823J	8.2K ohm	AA	R167, R168	VRD-ST2EY333J	33K ohm	AA
R107	VRD-SU2EY155J	1.5Meg ohm	AA	R169, R170	VRD-ST2EY223J	22K ohm	AA
R108	VRD-ST2EY155J	1.5Meg ohm	AA	R171, R172	VRD-ST2EY272J	2.7K ohm	AA
R109, R110	VRD-ST2EY563J	56K ohm	AA	R173, R174	VRD-ST2EY103J	10K ohm	AA
R111, R112	VRD-ST2EY155J	1.5Meg ohm	AA	R175, R176	VRD-ST2EY393J	39K ohm	AA
R113	VRD-ST2EY124J	120K ohm	AA	R177, R178	VRD-ST2EY333J	33K ohm	AA
R114	VRD-SU2EY124J	120K ohm	AA	R179, R180	VRD-SU2EY274J	270K ohm	AA
R115, R116	VRD-ST2EY273J	27K ohm	AA	R181, R182	VRD-ST2EY103J	10K ohm	AA
R117, R118	VRD-SU2EY564J	560K ohm	AA	R183, R184	VRD-ST2EY223J	22K ohm	AA
R119	VRD-ST2EY682J	6.8K ohm	AA	R185, R186	VRD-ST2EY220J	22 ohm	AA
R120	VRD-SU2EY682J	6.8K ohm	AA	R187, R188	VRD-ST2EY392J	3.9K ohm	AA
R121, R122	VRD-ST2EY182J	1.8K ohm	AA				
R123, R124	VRD-ST2EY472J	4.7K ohm	AA				
R125, R126	VRD-ST2EY562J	5.6K ohm	AA				

REF. NO.	PART NO.	DESCRIPTION	CODE	REF. NO.	PART NO.	DESCRIPTION	CODE
R189, R190	VRD-ST2EY332J	3.3K ohm	AA	R512	VRD-ST2EY103J	10K ohm	AA
R191, R192	VRD-ST2EY563J	56K ohm	AA	R513	VRD-ST2EY822J	8.2K ohm	AA
R193, R194	VRD-ST2EY224J	220K ohm	AA	R514	VRD-ST2EY101J	100 ohm	AA
R195, R196	VRD-ST2EY181J	180 ohm	AA	R515	VRD-ST2EY271J	270 ohm	AA
R197, R198	VRD-ST2EY102J	1K ohm	AA	R516	RR-XZ0002AGZZ	1 ohm, 1/2W, +5 -5%, Oxide Film	AB
R199, R200	VRD-ST2EY563J	56K ohm	AA	R525	VRD-ST2EY103J	10K ohm	AA
R201, R202	VRD-ST2EY184J	180K ohm	AA	R601, R602, R603, R604, R605, R606, R607, R608	Not Available	Part of Motor	
R203, R204	VRD-ST2EY151J	150 ohm	AA	CONTROLS			
R205, R206	VRD-ST2EY102J	1K ohm	AA	VR101, VR102	RVR-M0093AGZZ	10K ohm, Playback Level Adjust	AC
R207, R208	VRD-ST2EY102J	1K ohm	AA	VR103, VR104	RVR-P0050AFZZ	50K ohm, RECORD LEVEL	AP
R211, R212	VRD-SU2EY102J	1K ohm	AA	VR107, VR108	RVR-M0094AGZZ	5K ohm, Record Sensitivity Adjust (Normal Tape)	AC
R213, R214	VRD-SU2EY102J	1K ohm	AA	VR109, VR110	RVR-M0094AGZZ	5K ohm, Record Sensitivity Adjust (CrO ₂ Tape)	AC
R220	RR-XZ0001AGZZ	10 ohm, 1/2W, +5 -5%, Oxide Film	AB	VR111, VR112	RVR-M0094AGZZ	5K ohm, Meter Sensitivity Adjust	AC
R221	VRD-ST2EY472J	4.7K ohm	AA	VR301, VR302	RVR-M0049AGZZ	5K ohm, Bias Current Adjust	AC
R222	VRS-PT3DB391K	390 ohm, 2W, +10 -10%, Oxide Film	AB	VR601, VR602	Not Available	Part of Motor	
R223	VRS-PT3DB271K	270 ohm, 2W, +10 -10%, Oxide Film	AB	TRANSISTORS			
R231, R232	VRD-ST2EY473J	47K ohm	AA	Q101, Q102	VS2SC733-Y/-1	Equalizer Amp. (CrO ₂ Tape)	AF
R233, R234	VRD-ST2EY332J	3.3K ohm	AA	Q103, Q104	VS2SC733GR/-1	Record 1st Amp.	AF
R235, R236	VRD-ST2EY101J	100 ohm	AA	Q105, Q106	VS2SA562-Y/-1	Record 2nd Amp.	AG
R237, R238	VRD-ST2EY563J	56K ohm	AA	Q107, Q108	VS2SC733-Y/-1	Headphone Amp.	AF
R239, R240	VRD-ST2EY474J	470K ohm	AA	Q109, Q110	VS2SC733-Y/-1	Meter Amp.	AF
R301	VRD-ST2EY1R0J	1 ohm	AA	Q111, Q112	VS2SC735-Y/-1	Muting	AF
R302, R303	VRD-ST2EY330J	33 ohm	AA	Q113	VS2SC735-Y/-1	Muting	AF
R304, R305	VRD-ST2EY472J	4.7K ohm	AA	Q201	VS2SC1407-S1F	Ripple Filter	AF
R306	VRD-ST2EY103J	10K ohm	AA	Q301, Q302	VS2SC1213-B-3	Bias Oscillator	AF
R307	VRD-ST2EY102J	1K ohm	AA	Q303	VS2SC1213-B-3	Indicator (CrO ₂)	AF
R308	VRC-MT2HG181K	180 ohm, 1/2W, +10 -10%, Carbon	AA	Q304	VS2SC733-Y/-1	Peak Level Indicator	AF
R309	VRD-ST2LY332J	3.3K ohm	AA	Q305	VS2SC733-Y/-1	Peak Level Indicator	AF
R310	VRC-MT2HG680K	68 ohm, 1/2W, +10 -10%, Carbon	AA	Q601, Q602	Not Available	Part of Motor	
R311	VRD-ST2EY223J	22K ohm	AA	DIODES			
R312	VRD-ST2EY223J	22K ohm	AA	D101, D102	VHD1N60////-1	Switching	AC
R313	VRS-PT3AB471K	470 ohm, 1W, +10 -10%, Oxide Film	AB				
R314	VRD-ST2EY103J	10K ohm	AA				
R315	VRD-ST2EY272J	2.7K ohm	AA				
R316	VRD-ST2EY123J	12K ohm	AA				
R317	VRC-MT2HG152K	1.5K ohm, 1/2W, +10 -10%, Carbon	AA				
R320, R321	VRD-ST2DY123J	12K ohm	AA				
R511	VRD-ST2EY104J	100K ohm	AA				

REF. NO.	PART NO.	DESCRIPTION	CODE	REF. NO.	PART NO.	DESCRIPTION	CODE
D103, D104	VHD1S1555V/1G	Switching	AC	MISCELLANEOUS			
D105, D106	VHD1S1555V/1G	Switching	AC		DROLR0010AGZZ	Roller, Rewind	AK
D107, D108	VHD1S1555V/1G	Switching	AC		GCAB-5053AFSA	Cabinet, Wood	BB
D109, D110	VHD1S1555V/1G	Switching	AC		GCOVA1021AGSA	Cover, Indicator(RECORD/DOLBY/CrO ₂)	AB
D111, D112	VHD1S1555V/1G	Switching	AC		GCOVA1022AGSA	Window, Counter	AC
D113, D114	VHD1S1555V/1G	Switching	AC		GCOVA1023AGSA	Illumination, Tape	AC
D115, D116	VHD1N60////-1	Meter Rectifier	AC		GCOVA1024AGSA	Illumination, Lamp	AC
D301	VHD1S1555V/1G	Switching	AC		GCOVH1150AFSA	Cover, Head	AD
D302	VHD1S1555V/1G	Switching	AC		GCOVH3094AGZZ	Reflector, Tape	AC
D303	VHD1N60////-1	Peak Level Indicator	AC		GFTAC3009AGSA	Illumination Lamp	AH
D304	VHD1N60////-1	Peak Level Indicator	AC		HDECP0008AG00	Lid, Cassette Compartment	AB
D305	VHD1S1555V/1G	Miss Working Prevention	AC		HDECP0050AFZZ	Plate, Jacks	AB
D306	VHPGL50RG/-1	Peak Level Indicator	AP		HDECA0250AFSA	Masking, Tape Switch	AB
D503	VHD1S1555V/1G	Clamping	AC			Bracket, Cassette	AH
D504	VHD1S1886//1	Surge Absorber	AD		HINDM0934AGSA	Compartment Bottom	AF
D505	VHD1S1555V/1G	Rectifier	AC			Decoration, Peak Level	AF
D506	VHD1S1555V/1G	Rectifier	AC		HINDM0953AFSA	Indicator	AZ
D507	VHD1S1886//1	Protection Circuit	AD		HINDM0960AFSA	Decoration, Tape Counter	AG
D512, D513	VHD1S1886//1	Rectifier	AD		HINDM0955AFSA	Decoration, Record Level	AG
D514, D515	VHD1S1886//1	Rectifier	AD		HINDM0955AFSA	Decoration, Level Meter	AK
D601, D602	Not Available	Part of Motor			HINDM0961AF00	Decoration, REC/PB	AE
ZD101, ZD102	VHE02Z6R8A/-1	Constant Voltage	AE		HINDP0100AFSA	Indication Plate, RECORD	AB
ZD201	VHEBZ-192//1G	Constant Voltage	AG		HINDP0101AFSA	Indication Plate, DOLBY	AB
SCR501	VHS1RC5////-1	Silicon Controlled Rectifier	AK		HINDP0102AFSA	Indication Plate, CrO ₂	AB
COILS					HPNLC3183AGSA	Panel, Top	AU
L101, L102	RCILL0001AGZZ	19 kHz Low Pass Filter	AM		JBOTN0050AFSA	Button Assembly	AV
L103, L104	RCILZ0051AGZZ	Record Equalizer	AE		JKNBM0206AFSA	Knob, EJECT	AF
L105, L106	RCILZ0051AGZZ	Record Equalizer	AE		JKNBM0205AFSA	Knob, POWER	AF
L301, L302	RCILB0087AGZZ	Bias Step-up	AF		JKNBP0038AGSA	Knob, RECORD LEVEL	AD
L303	RCILB0085AGZZ	Bias Oscillator	AF		KCOUB0037AGZZ	Counter	AP
L501	RPLU-0050AFZZ	Solenoid	AQ		LANGA0029AGZZ	Bracket, Cassette	AA
L601	Not Available	Part of Motor			LANGF0219AGFW	Compartment Lid	AB
TRANSFORMERS						Bracket, Compartment	AB
T101, T102	RTRNS0027AGZZ	Headphone Output	AE		LANGF0267AGFW	Shaft, Left Hand	AD
T501	RTRNP0312AGZZ	Power	BD		LANGF0268AGZZ	Bracket, Motor	AD
INTEGRATED CIRCUITS					LANGF0269AGZZ	Bracket, Auto Stop Lever	AE
IC101, IC102	RH-IX0437AGZZ	Audio Amp.	AH		LANGF0269AGZZ	Bracket, Strengthen, Right	AB
IC103, IC104	RH-IX0431AGZZ	Dolby Noise Reduction Circuit	AY		LANGF0308AFFD	Bracket, Top Panel	AC
					LANGF0315AFFD	Bracket, Cassette	AB
						Compartment Lid	
					LANGJ0024AGZZ	Bracket, Center	AE
					LANGJ0025AGZZ	Bracket, Left Side	AD
					LANGJ0026AGZZ	Bracket, Right Side	AE
					LANGK0127AGZZ	Bracket, Counter	AD
					LANGQ0270AGZZ	Bracket, Jacks	AC
					LANGQ0351AGZZ	Bracket, Record Level	AH
						Control	
					LANGQ0416AFFD	Bracket, Wire Retaining	AB
					LANGQ0420AFZZ	Bracket, CrO ₂ Tape	AB
						Switch Adjust	
					LANGT0402AGFW	Bracket, Switch Retaining	AD
					LANGT0403AGZZ	Bracket, Eject Lever	AB
					LANGT0404AGZZ	Bracket, Front	AG
					LANGT0405AGZZ	Bracket, Rear	AG
					LANGT0406AGZZ	Bracket, Illumination Lamp	AD
					LANGT0458AFZZ	Bracket, CrO ₂ Tape	AE
						Sensing	
					LANGT0462AGFD	Bracket, Flywheel	AE
					LANGT0468AFZZ	Bracket, Muting Circuit	AC
						Board	

REF. NO.	PART NO.	DESCRIPTION	CODE	REF. NO.	PART NO.	DESCRIPTION	CODE
	LBOSF0001AGZZ	Spacer, Eject Lever	AB		NROLM0008AGZZ	Roller, Sub-chassis	AB
	LBSHC0002AGZZ	Bushing, AC Cord	AB		PCOVM1005AGFA	Washer Oil Cut	AA
	LBSHC0004AGZZ	Bushing, AC Cord	AC		PCOVP1069AGZZ	Cover, Tip	AA
	LBSHC0007AFZZ	Bushing, AC Cord	AB		PCOVU1060AGZZ	Cover, Illumination	AC
	LCHSM0204AFZZ	Mechanism Mounting Plate	AW		PCOVW9058AFZZ	Insulator, AC Power Supply	AC
	LCHSS0157AGZZ	Sub-chassis	AL		PCOVW9057AG00	Insulator, Auto Stop Switch	AA
	LDAIH0010AGZZ	Head Mount, Erase	AB		PCUSG0030AG00	Cushion, Cassette Compart- ment Lid	AA
	LHLDW3002AFZZ	Wire Holder	AA		PCUSS0056AF00	Cushion, Rubber	AA
	LHLDW3003AFFD	Wire Holder	AA		PFLT-0208AG00	Felt, RECORD LEVEL	AA
	LHLDW3007AGZZ	Wire Holder	AA		PFLT-0210AG00	Felt, Power Switch	AA
	LHLDZ1039AG00	Holder, Level Meter	AE		PFLT-0252AF00	Felt, Power Switch	AA
	LHLDZ1040AG00	Holder, Illumination Lamp	AE		PSLDC3020AGZZ	Bracket, Shield	AC
	LHLDZ1041AG00	Holder, Peak Level	AB		PSLDC3050AFZZ	Bracket, Shield, Low Pass Filter	AD
	LSLVM0018AGFW	Indicator Spacer, Fast Forward Roller Lever	AA		PSPAB0034AGFW	Spacer, Eject Prevention Lever	AA
	LX-BZ0091AGFD	Screw, Brake Lever	AB		PSPAB0071AGFW	Spacer, Pause Lever	AA
	LX-BZ0107AGZZ	Screw, Thrust Adjust	AB		PSPAG0001SEZZ	Holder, Lamp	AA
	LX-NZ0012AGFD	Nut, Brake Lever	AB		PSPAG0024AG00	Spacer, Reed Switch Board	AA
	LX-NZ0108AFFN	Nut, Microphone/ Headphone Jacks	AB		PSPAJ0010AGZZ	Spacer, Jacks	AB
	MLEVF0254AGFD	Lever, Fast Forward Roller	AE		PZETF0104AFZZ	Insulator, Transformer	AA
	MLEVF0288AGZZ	Lever, Slip Roller	AK		PZETV0007TAZZ	Cover, Tip	AA
	MLEVF0308AGFD	Lever, Record Safety	AD		QACCN0001AGZZ	AC Cord	AP
	MLEVF0392AGFD	Lever, Fast Forward	AB		QACCS9001SE00	AC Cord	AG
	MLEVF0463AGFD	Lever, Record Connecting	AE		QACCV0001AGZZ	AC Cord	AN
	MLEVF0464AGFW	Lever, Eject Prevention	AD		QACCC0006AG00	AC Cord	AH
	MLEVF0465AGFD	Lever, Pause Operation	AD		QCNCM0402SGZZ	Plug, 4 Pin	AD
	MLEVF0466AGFD	Lever, Record Prevention	AC		QCNCM0503SGZZ	Plug, 5 Pin	AD
	MLEVF0467AGFD	Lever, Auto Stop	AD		QCNCM0604SGZZ	Plug, 6 Pin	AD
	MLEVF0469AGZZ	Lever, Pressure Roller	AG		QCNCM0705SGZZ	Plug, 7 Pin	AE
	MLEVF0470AGFD	Lever, Eject, Steel	AD		QCNCM0806SGZZ	Plug, 8 Pin	AE
	MLEVF0471AGZZ	Lever, Record/Playback	AG		QCNCM1001AGZZ	Plug, 10 Pin	AE
	MLEVF0502AFZZ	Lever, Brake Operation	AE		QCNCM1101AGZZ	Plug, 11 Pin	AE
	MLEVF0505AFFD	Lever, Brake	AC		QCNCW0401SGZZ	Socket, 4 Pin	AB
	MLEVP0019AGSA	Roller, Fast Forward	AM		QCNCW0502SGZZ	Socket, 5 Pin	AB
	MLEVP0041AGZZ	Lever, Eject	AC		QCNCW0603SGZZ	Socket, 6 Pin	AB
	MLOKC0050AG00	Lever, Lock	AC		QCNCW0704SGZZ	Socket, 7 Pin	AC
	MRODM0043AGFW	Rod, Auto Stop	AC		QCNCW0805SGZZ	Socket, 8 Pin	AC
	MSPRC0031AGMN	Spring, Head Azimuth	AA		QCNCW1002AGZZ	Socket, 10 Pin	AB
	MSPRC0041AGMN	Spring, Brake Lever	AA		QCNCW1101AGZZ	Socket, 11 Pin	AC
	MSPRP0062AGFJ	Spring, Sub-chassis Retainer	AB	F503	QFS-C122CAGNI	Fuse, 1.25A	AE
	MSPRP0089AGFW	Spring, Cassette Retaining	AB	F501,			
	MSPRP0101AFFW	Spring, CrO ₂ Tape Sensing	AD	F502,	QFS-C801CAGNI	Fuse, 800mA	AE
	MSPRP0217AGFW	Spring, Compartment Shaft	AB	F504			
	MSPRT0102AGFJ	Spring, Pressure Roller Lever	AB		QFSHC0003AGZZ	Fuse, Holder	AD
	MSPRT0105AGFJ	Spring, Back Tension	AB		QCNCW-0031AGZZ	Connecting Cord	AG
	MSPRT 0151AGFJ	Spring, Slip Roller Lever	AA	J101,			
	MSPRT0153AGFJ	Spring, Fast Forward Lever	AA	J102	QJAKE0051AFZZ	Jack, Micophones	AE
	MSPRT0159AGFJ	Spring, Pressure Lever	AA	J107	QJAKE0052AFZZ	Jack, Headphone	AE
	MSPRT0161AGFJ	Spring, Record Safety Lever	AA		QLUGL0202AGZZ	Lug Terminal, 2 Terminal	AB
	MSPRT0269AGFJ	Spring, Eject Lever	AA		QLUGL0305AGZZ	Lug Terminal, 3 Terminal 2 Ground	AC
	MSPRT0270AGFJ	Spring, Cassette Compart- ment Lid	AA		QLUGQ0104CEFW	Lug Terminal	AA
	MSPRT0275AGFJ	Spring, Pressure Lever	AB		QLUGQ0107CFN	Lug Terminal	AA
	MSPRT0277AGFJ	Spring, Eject Lever	AB		QLUGQ0105AGZZ	Lug Terminal, Test Point	AA
	MSPRT0311AFFJ	Spring, Pause	AB		QLUGZ0101SEFW	Lug Terminal	AA
	NBALS0004AGFJ	Ball, 3φ	AA		QLUGZ0103CEFW	Lug Terminal, Test Point	AA
	NBLTK0045AG00	Belt, Drive	AD		QPWBF0329AGZZ	Printed Wiring Board, Reed Switch	AC
	NBLTM0037AG00	Belt, Counter	AD		QPWBF0330AGZZ	Printed Wiring Board, Bias Oscillation	AK
	NDAIR0053AGSA	Turntable, Take-up/Supply	AF				
	NFLYC0009AGFD	Flywheel	AL				

REF. NO.	PART NO.	DESCRIPTION	CODE	REF. NO.	PART NO.	DESCRIPTION	CODE
	QPWBF0382AFZZ	Printed Wiring Board, Record/Playback Amp.	AQ	SW6	QSW-S0074AGZZ	Switch, Input Sensitivity	AE
	QPWBF0332AGZZ	Printed Wiring Board, Record Level Control	AL	SW1, SW2	QSW-S0075AGZZ	Switch, Record/Playback	AH
	QPWBF0361AFZZ	Printed Wiring Board, PEC/PB Socket	AD		QTIPF0001CEYW	Tip	AA
	QPWBF0366AGZZ	Printed Wiring Board, Pilot Lamp	AE		QTIPZ0002SGZZ	Tip, Connector	AA
	QPWBF0384AFZZ	Printed Wiring Board, Muting	AD		RHEDA0051AFZZ	Head, Erase	AN
					RHEDH0018AGZZ	Head, Record/Playback	AZ
				PL1,PL2	RLMP-0002AGZZ	Pilot Lamp, Meter	AE
				PL3	RLMP-0002AGZZ	Pilot Lamp, Cassette Illumination	AE
S0501	QSOCE0303AGZZ	Socket, Voltage Selector	AH	PL6	RLMPM0026AGZZ	Pilot Lamp, CrO ₂	AE
S0101	QSOCZ9053AFZZ	Socket, REC/PB	AH	PL5	RLMPM0027AG06	Pilot Lamp, RECORD	AE
SW5	QSW-M0050AFZZ	Switch, Tape Selector	AG	PL4	RLMPM0051AF02	Pilot Lamp, DOLBY	AE
SW4	QSW-B0039AGZZ	Switch, Dolby	AM	ME101,	RMTRL0082AGZZ	Meter, Record/Playback Level	AT
SW7	QSW-F0014AGZZ	Switch, Bias	AF	ME102			
SW12	QSW-F0048AGZZ	Switch, Auto Stop	AE		RMOTV0003AGZZ	Motor	BB
SW13	QSW-L0002AGZZ	Switch, Reed Type	AG		RTPEK0034AGZZ	Cassette Tape	AP
SW16	QSW-F0056AGZZ	Switch, Muting	AF		TSPC-0310AFZZ	Indication Plate, Specification	AC
SW8	QSW-M0012AGZZ	Switch, Auto Stop	AF				
SW9	QSW-M0012AGZZ	Switch, Muting	AF				
SW15	QSW-P0076AGZZ	Switch, Power	AM				